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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/736,130 | 12/15/2003 | Bradley W. Smith | 14280 | 3621 |
| 7590 | 06/30/2005 | | EXAMINER | |
| Sally J. Brown AUTOLIV ASP, INC. 3350 Airport Road Ogden, UT 84405 | | | SPISICH, GEORGE D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3616 | |

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/736,130 | SMITH ET AL. | |
| | Examiner | Art Unit | |
| | George D. Spisich | 3616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5,9-15 and 19-35 is/are rejected.
- 7) Claim(s) 6-8 and 16-18 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 December 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/15/03.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the inflatable structure in addition and separate from the inflation module comprising a piston device (as claimed in claim 24-27) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claims 24-27, there is claimed "the seat mounting structure further comprises an inflatable structure....". In claim 15 (from which claim 24 depends), there is claimed "an inflation module comprising a piston device". There is no embodiment where there is a piston device as part of the inflation module and an additional inflatable structure. As the claim is present worded the inflatable structure must be separate from the piston device, not a different title for the same device.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13,14 and 23-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13,14,23 and 28 are unclear and inaccurate. As presently claimed in claims 13 and 23, there is claimed the seat mounting structure "further comprises a seat belt...." and in claims 14 and 28, the seat mounting structure "further comprising a side airbag". This is not accurate as the seat mounting structure does not include a seat belt or a side airbag. These elements are not part of the seat mounting structure and therefore can not be claimed as the seat mounting structure comprising a belt or side airbag. Furthermore, the presence of a seat belt or a side airbag in the seat is not related to Applicant's invention.

Claims 24-27 are unclear. Claims 24-27 claim an inflatable structure that stiffens a floor structure. There does not appear to be an embodiment having the structure of claim 15 (inflation module comprising a piston device), and also an additional inflatable structure that stiffens a floor structure as is claimed. Applicant may not claim the same element by different names when using the language "further comprises".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,9,32 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Woolley (USPN 5,149,165 provided in Applicant's IDS).

Woolley discloses a seat mounting structure for use in a vehicle that lessens the risk of injury to an occupant in side-impact collisions, the seat mounting structure comprising a sensor system (24), a linkage system (mounts of the seat that in operation release and pivot) that guides a seat vertically up and laterally toward a centerline of the vehicle, and an inflation module comprising an inflator (34) and an inflatable structure (33) wherein the inflatable structure inflates in response to the sensor system and the inflation of the inflatable structure displaces the seat in accordance with the linkage system.

Inherently, the inflation of the inflatable structure would add (to some degree) structure rigidity to the floor to stiffen the floor of the vehicle to resist intrusion in a side impact.

The displacement of the seat approximates curvilinear translation of the seat.

The method of operation would be as claimed in claims 32 and 33.

Claims 29 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith (USPN 5,845,937 provided in Applicant's IDS).

Smith discloses an inflation module for use in a vehicle that stiffens a floor structure of a vehicle to lessen the risk of injury to an occupant in side impact collisions, the inflation module comprising an inflator (20) and elongated inflatable structure securely attached to the floor structure, wherein the elongated inflatable structure (at least a portion of the device labeled "C" in Fig.1) is oriented perpendicular to a sidewall of the vehicle where inflatable structure comprises metal.

This arrangement is disposed under a seat of the vehicle.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3,4,5 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woolley (USPN 5,149,165) in view of Galbraith et al. (USPN 5,615,914 provided in Applicant's IDS).

Woolley has been discussed in the prior rejection. However, there is no detail to the inflatable member being made of metal of a particular thickness and having folded sidewalls.

Galbraith et al. discloses an elongated metal airbag having two folded side walls.

It would have been obvious to one of ordinary skill in the art to make the inflatable member of Woolley from metal as disclosed by Galbraith et al. so as to make the inflatable member more structurally durable and stable.

With respect to the dimensions of the thickness of the metal, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the thickness of the metal would be an obvious design choice to provide the specific function as disclosed by Woolley.

Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woolley (5,149,165) in view of Breed (USPN 6,209,909 provided in Applicant's IDS).

Woolley has been discussed in a prior rejection. However, Woolley does not disclose an anticipator sensor, a radar sensor or an optical sensor.

Breed (in col. 2, lines 52-58) discloses the known anticipatory sensor which include at least an optical sensor or a radar sensor, in the safety system sensing art. These sensors are effective in detecting impending collisions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an anticipatory sensor of the type taught by Breed to detect impending collisions to trigger the shifting seat arrangement of Woolley so as to

properly and effectively operate the seat arrangement and increase the protection for the occupant.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woolley (USPN 5,149,165 in view of Tame (USPN 5,123,673).

Woolley have been discussed in a prior rejection. However, Woolley does not show the seat having a seat belt coupled to the seat for restraining the occupant.

Tame is discloses a seat having a seat belt coupled thereto for restraining an occupant. Providing a seat belt on a seat is old and well known in the vehicle art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a seat belt coupled to the seat of Woolley as taught by Tame so as to provide an occupant with the necessary and proper restraint for increasing protection.

Claims 14 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woolley (USPN 5,149,165) in view of Genders et al. (USPN 5,967,603).

Woolley has been discussed in a prior rejection. However, Woolley does not show a seat having a side airbag.

Genders et al. show a seat having a side airbag for inflating in a collision to provide protection to an occupant. It is old and well known in the vehicle art to have a seat with a side airbag for protecting the occupant in the event of a collision.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the seat of Woolley by providing a side airbag in the seat as taught by Genders et al. and inflate the airbag in conjunction with the seat shifting mount so as to provide increased protection to the occupant in the event of a collision.

Claims 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woolley (USPN 5,149,165) in view of (Vandermolen (USPN 6,120,082).

Woolley has been discussed in a prior rejection. However, Woolley does not disclose an inflation module comprising a piston device to displace the seat.

Vandermolen discloses a seat displacing device having an inflatable module (30) which is disclosed as a strut. This strut would include a piston. This piston device is actuated to displace the seat.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the seat arrangement of Woolley by using an inflation module comprising a piston as taught by Vandermolen so as to provide positive and definitive movement of the seat in an efficient manner so as to protect the occupant.

Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woolley ('165) in view of Vandermolen ('082) as applied to claims 15 and 19 above, and further in view of Breed (USPN 6,209,909 provided in Applicant's IDS).

Woolley in view of Vandermolen has been discussed in a prior rejection.

However, Woolley does not disclose an anticipator sensor, a radar sensor or an optical sensor.

Breed (in col. 2, lines 52-58) discloses the known anticipatory sensor which include at least an optical sensor or a radar sensor, in the safety system sensing art. These sensors are effective in detecting impending collisions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an anticipatory sensor of the type taught by Breed to detect impending collisions to trigger the shifting seat arrangement of Woolley in view of Vandermolen, so as to properly and effectively operate the seat arrangement and increase the protection for the occupant.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woolley ('165) in view of Vandermolen ('082) as applied to claims 15 and 19 above, and further in view of Tame (USPN 5,123,673)

Woolley in view of Vandermolen has been discussed in a prior rejection. However, Woolley does not show the seat having a seat belt coupled to the seat for restraining the occupant.

Tame discloses a seat having a seat belt coupled thereto for restraining an occupant. Providing a seat belt on a seat is old and well known in the vehicle art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a seat belt coupled to the seat of Woolley as taught by

Tame so as to provide an occupant with the necessary and proper restraint for increasing protection.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woolley ('165) in view of Vandermolen ('082) as applied to claims 15 and 19 above, and further in view of Genders et al. (USPN 5,967,603)

Woolley in view of Vandermolen has been discussed in a prior rejection. However, Woolley does not show a seat having a side airbag.

Genders et al. show a seat having a side airbag for inflating in a collision to provide protection to an occupant. It is old and well known in the vehicle art to have a seat with a side airbag for protecting the occupant in the event of a collision.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the seat of Woolley by providing a side airbag in the seat as taught by Genders et al. and inflate the airbag in conjunction with the seat shifting mount so as to provide increased protection to the occupant in the event of a collision.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (USPN 5,845,937 provided in Applicant's IDS).

The claimed dimensions are not disclosed in Smith. It would have been obvious to one of ordinary skill in the art to construct the inflatable structure from metal having a thickness of about 0.04 to 0.06 inches as this would be an obvious design choice.

Allowable Subject Matter

Claims 6-8 and 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art does not disclose the specific structure of the linkage system as claimed

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Breed (USPN 6,755,273), Racine (USPN 2,970,862), Hartl (USPN 2,736,566), Mans (USPUB2002/0130528), Daniel et al. (USPN 5,328,234), McCarthy (USPN 5,567,006), Andersson (USPN 6,067,887), Swann et al. (USPN 6,302,481), Gnauert et al. (USPN 6,764,086), Wang et al. (USPN 6,869,132), FR 2786140, Gibby (USPN 6,364,399).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George D. Spisich whose telephone number is (571) 272-6676. The examiner can normally be reached on Monday-Friday 9:00 to 6:30 except alt. Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George D. Spisich
June 20, 2005



 6/27/05
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